

# The Medical Times and Register.

VOL XXXVIII No. 7.

PHILADELPHIA AND BOSTON, JULY, 1900.

WHOLE NO. 905

FRANK S. PARSONS, M. D., - Editor. JOSEPH R. CLAUSEN, A. M., M. D., Manager.  
DORCHESTER, BOSTON, MASS. 1409 ARCH STREET, PHILADELPHIA, PA.

## .....EDITORIAL STAFF.....

T. H. MANLEY, M. D., New York, N. Y. J. A. TENNEY, M. D., Boston, Mass.  
J. J. MORRISSEY, A. M., M. D., New York, N. Y. EDWARD A. TRACY, M. D., Boston, Mass.  
LOUIS FISCHER, M. D., New York, N. Y. H. B. SHEFFIELD, M. D., New York, N. Y.  
LEOPOLD F. W. HAAS, M. D., New York, N. Y.



## \*\*\*\*\* ORIGINAL \*\*\*\*\*

unit

### CAUSATION AND RELATIVE FREQUENCY OF TYPHILITIS, PERITYPHLITIS AND APPENDICITIS IN INFANCY AND CHILDHOOD.

BY JOSEPH HENRY BYRNE, M. D.

Visiting Surgeon Metropolitan Hospital and Dispensary, New York City.

Patient research and our advanced pathological knowledge have cleared up many an obscurity and forced us to disregard many a theory that only a few years since appeared tenable. Grisoble about 1839 did his best to controvert the teachings of Albers, which he correctly perceived were erroneous, but owing to the support of Dupeyren, Ferrall, Læunac and others, equally as prominent, his views were completely lost sight of for nearly fifty years. He claimed that inflammations of the cecum were not accompanied by productions of pus and perforations of the appendix, and pointed out that dysentery and ulceration of

this part had no tendency to involve the adjacent connective tissue, but that disease of vermiciform appendix with its phlegmonous inflammation, pus formation and perforations explained satisfactorily the chain of events as we now know them to take place. The weight of evidence is so great that it must now be apparent to all that inflammation of the cecum takes little or no part on the production of appendicitis; that few cases of typhilitis exist as a primary disease, and that perityphilitis only occurs as a secondary complication. The cecal theory is now a thing of the past, as all clinical and pathological evidence is opposed to it. Renvers in 586 autopsies after perityphilitis found the-

\* Abstract of Essay read at meeting of American Medical Association, Section of Pediatrics, Atlantic City, June 6, 1900.

appendix ruptured in 497 cases. Agar in 218 similar cases found the cecum ruptured only 29 times, but does not state whether this took place from without inwards or in the opposite direction. It is well known that inflammation of the large and small bowel has little or no tendency to involve the peritoneum, and that the opposite is the rule with the inflamed appendix. With this in mind it is easy to understand how the inflammatory process can extend to the serous coat of the neighboring parts and the adjacent connective tissue. As careful an observer as Talemon states that early operation seldom or never shows that the cecum is involved (by inflammation or perforation), but admits that it may become the seat of trouble, which, however, is secondary to disease of the appendix, not including those cases of tuberculosis, dysentery and typhoid. Stercoral accumulation in the cecum may occasionally produce a mild inflammation, but never give rise to ulceration, and easily disappear upon the administration of purgatives.

The inner coat of the gastro intestinal tract is frequently the seat of varying degrees of inflammation in infancy and childhood, and more especially during the warmer months. Therefore if these ordinary inflammatory processes took a prominent part in the production of appendicitis, this disease would be more frequently met with during the summer season, but such is not the case. Statistics prove beyond a question that this trouble is rather infrequent before the fourth year, increasing between that and the 10th, and that the majority occur between here and the thirtieth year. I have yet to see in my fifteen years' experience a case of primary typhlitis or erythphlitis, and as the literature

of recent years shows the experience of others to be somewhat similar, my paper, therefore, resolves itself into one on appendicitis.

The appendix varies more in size, position and general make-up than all the other structures of the human anatomy. In the early periods of life it is very rich in lymphoid tissue, and has been styled the tonsil of the intestines. The size bears no relation to the frequency of the disease. The organ being a functionless and rudimentary one, with a blood supply that can easily be interfered with, and which under healthful conditions seems barely sufficient, it must, therefore, be more or less susceptible, on account of its low degree of vitality, to inflammatory disturbance. The physiologist assigns to it no special function or even an indirect part in our vital economy.

The credit for our present knowledge belongs to us owing to the excellent work of Weir and McBurney, of New York; Fitz, of Boston, and Hodenpyl, of this city, who, by the way, was the first to suggest that the bacillus coli communis played an important part in the production of the disease.

#### ETIOLOGY.

The presence of foreign bodies is now looked upon as a minor factor in producing appendicitis, but when they do exist they, like concretions, act in a mechanical way. When the mesentery is long the appendix is likely to assume a position that is almost straight, but when it is incomplete it may become curved or twisted, thus interfering with the circulation, and also with the free drainage of the normal secretion, preventing the egress of any fecal matter that might enter, thus favoring the formation of concretions. The appendix is not at all ex-

clusive in the choice of position, and in about sixty per cent. of the cases the site selected favors gravity and facilitates free drainage, but when the position is a pendent one the ingress of matter is aided, while the egress is hampered, thus inviting the formation of concretions. The cavity of the appendix and the opening into the cecum often predispose to inflammation; previous attacks of disease or retrograde metamorphosis having resulted in a narrowing of the latter or the production of one or more structures of the lumen. Strictures are very frequent between the first and fifteenth years, and the question as to whether these lesions are pathological or the natural consequence of retrograde changes is not yet satisfactorily decided. They have been found a number of times in the foetus and also in the new born.

Relatively the appendix is larger in foetal life infancy and childhood than it is in the adult, and compares to the large bowel as 1:10, while in the latter it is 1:20. It is also somewhat longer and wider in the male than in the female, and this holds good in early life. It reaches its maximum size between the tenth and twentieth years, and from here on it remains at a standstill or diminishes. This diminishing ratio is nothing more than a physiological or pathological retrogression, and with it goes a decreasing vascularity, and as the tissues receive their nourishment through the blood I am therefore firmly convinced that the slight immunity that exists in early life can be credited to the fact that these changes in the majority of cases are not sufficient to interfere with the integrity of the part until after the fifteenth year, and statistics support this assumption, as only fifteen per cent. of all cases of appendicitis occur prior to

the fifteenth year. The female, both young and old, is less frequently the victim of appendicitis than the male. The comparatively smaller size of the organ with its increased vascularity (an anastomotic branch being given off from the region of the right ovary), accounts for this slight immunity.

One attack of appendicitis predisposes to subsequent inflammation, and this may be brought about either by a constriction, adhesive bands, the presence of a concretion or interference with the circulation. Constipation, or diarrhoea, if at all, are only minor etiological factors. If, as Mai-caigne states, the bacillus coli communis of diarrhoeal discharges is much more virulent than it is in the healthy bowel, diarrhoea may then become a more active agent. Any inflammatory state in this region may at times result in an appendicitis, especially if one or more of the predisposing conditions exist, owing to the fact that the appendix is less capable of resistance on account of its diminished vitality.

In early life the mucous membrane of the appendix possesses wonderful powers of absorption, and this in itself may become an active predisposing cause.

Exposure is a possible element in the causation of the disease. Several instances have been recorded, but none during infancy or childhood, so far as I have observed.

Typhoid and tubercular ulcers of the appendix are met with post mortem, but are seldom seen after operation. When the solitary glands of this organ are involved during an attack of the former disease, the process of healing may result in the formation of a constriction, and thus this disease may become a factor in bringing about this affection. Micro organisms are now looked upon as being active exciting

agents, and the bacillus coli communis is the germ most frequently found. Hodenpyl notes its presence in 34 out of 35 cases ; Hawkins, 57 out of 61 ; and others give like experience. They may act independently, but their invasion is usually secondary to some existing condition. Welsh states that the bacillus coli communis is innocent if the integrity of the mucous membrane is maintained, but becomes pathogenic when the same is inflamed or injured. Hodenpyl, however, found numerous bacilli in the walls of the appendix without any lesion of the membrane.

Traumatism as a cause of appendicitis may be of two kinds—direct and indirect. Instances of the former are matters of record, and while it is possible for indirect violence to become an etiological factor, I feel positive that the appendix is already in a receptive state, and, therefore, while the injury may seem to be the active agent, it is only a minor factor in the causation of the trouble. Foreign bodies and concretions, when they exist, no doubt play an important role. The former may become a nucleus for the latter, which are always formed in the appendix, but they both occur less frequently than was formerly supposed. When they do exist they act as irritants to the mucous membrane, producing a catarrhal inflammation and facilitating the invasion of micro organisms, and secondarily, by mechanical interference; occluding the lumen, acting as a ball valve at the opening itself, or the seat of the stricture, obstructing the circulation even so far as producing gangrene, and finally by pressure.

#### EXPRESSION OF A CONCRETION BY DIGITAL MANIPULATION.

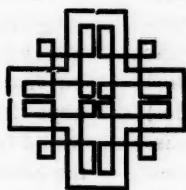
On April 15, 1900, I was called to

see a boy of 10 years who had been suffering from constipation for five or six days. Two days prior to my visit, on forcing a movement, he was taken with pain about the umbilicus, which continued at irregular intervals. On the morning of the 15th he was seized with severe vomiting, the pain increasing so as to produce syncope. When I saw him he was on his side, with the thighs flexed, and stated that this was the most comfortable position. Temperature, 101 ; pulse, 114 ; complained of continuous pain with frequent severe spasmodic seizures, which caused him to cry out. The abdominal wall was exceedingly thin, muscular resistance not marked. I was therefore able to make out the appendix with comparative ease, and found it in a state of erection and in a somewhat unusual location, directed upward and outward toward the crest of the ilium. The appendix I judged to be about three inches long and about one inch from its distal end I discovered a small but hardened fecal mass, which I pressed toward the gut. On the following day his condition was about the same, but I was unable to make out the appendix owing to muscular resistance. Suggested operation, but the father preferred waiting until the following morning, when to my surprise the boy had greatly improved. Temperature, normal ; pulse, 84. No pain, tenderness greatly diminished ; the appendix could be felt, but the concretion was no longer in evidence. Complained of extreme hunger and stated that he was entirely well. Case passed out of my hands on the 19th, as the parents considered a recurrence the main indication for an operation.

The expression of hardened fecal masses by digital manipulation, to my knowledge, has never before been referred to, and although the cases in

which this mode of procedure would be applicable must necessarily be few, I could not refrain from directing at-

tention to the manner in which this very satisfactory result was accomplished.



MEDICO-LEGAL RESPONSIBILITY OF THE AGED AND THE PREMATURE SENILE CONSIDERED MENTALLY, PHYSICALLY AND MORALLY, PARTICULARLY CONCERNING THEIR SEXUAL FAILINGS, WITH CASES ILLUSTRATIVE.

BY J. J. CALDWELL, M. D., BALTIMORE, MD.

History is replete with the feelings of old age. The exceptions are rare and stand out like meteors in the midnight sky or as rare as the true genius —one in ten thousand. "There is a senile dementia and a form of dementia associated with general paralysis. Dementia has also its stages of forgetfulness, irrationality, incomprehension and inappetency. A patient suffering from dementia, as he passes from bad to worse, first exhibits a want of memory, then loss of reasoning power, then inability to comprehend, and lastly an abolition of the common instincts and of volition." (P. 50, Field's Medico-Legal Guide.)

"In the progress of this mental disorder the mind usually dwells only on the past, and the thoughts succeed one another without any obvious bond of association.

"Delusions, if they do exist, are only temporary and leave no permanent impression, and for anything recent the mind is exceedingly weak. If it occurs as acute dementia in young people it is generally incurable. In old men, in whom it most frequently occurs, it is called senile dementia, and indicates the breaking down of the mental powers in advance of bodily decay. The persons may become oblivious of names and dates."

Professor George M. Beard, now deceased, the great neurologist and electrician of New York City, and author of an elaborate work on these subjects, has divided a paper read before the Medico-Legal Society of New York into three heads, viz.:

1st. What is the average effect of old age on the mental faculties? In other words, what is the law of the relation of age to work?

2d. To what extent is the average responsibility of men impaired by the change which the mental faculties undergo in old age?

3d. How shall the effects of age on the mental faculties be best brought to the attention of our courts of justice?

These questions have been a life-long study with the scientist, who set about making his investigations without fear or prejudice, and in the full hope that the result of his researches would be made available in deciding the conditions of the minds of men past the full maturity of life.

Dr. Beard has deduced these general results from his extended investigations, viz.:

The golden decade is between 30 and 40.

The silver decade is between 40 and 50.

The iron decade is between 50 and 60.

The tin decade is between 60 and 70.

The wooden decade is between 70 and 80.

He found that 70 per cent. of the work of the world is done before the age of 45. Nearly all the great systems of theology, metaphysics and philosophy are the result of work done between 20 and 50 years of age. Horses live about 25 years, but are at their best between 8 and 14.

Dogs live 9 to 10 years, and are best for hunting purposes from 2 to 6 years. Children born from parents healthy in middle life (from 25 to 40 years), are stronger and smarter than those born of parents either younger or older than these extremes ; and the same fact applies to the breeding of other animals, as in horses, dogs and cattle. The hen has her best laying capacity at her third year. She will lay in an average lifetime, say nine years, from 500 to 700 eggs. In her first year only 18 eggs ; in her second year about 110 ; in her third 130, the golden period ; in her ninth only 10 eggs, if any. In old men the faculties morally deteriorate, as do the physical.

This does not necessarily make an old man a bad citizen, in the true sense of the term, as of a neighbor, or a harm producing person. But unless sustained by a higher power he is apt to give a looser rein to his feelings and expressions, to display irritability, less consideration for the feelings of others, and if he has any variety of brain trouble this is apt to reflect on his every act.

The diseases to which the brain is liable through a long course of years are many, such as blows, destroying the memory of names, dates, locations and events ; a bereavement has destroyed the memory of names alone. Millionaires, once known for their liberality, have grown stingy in old age. Hemorrhage on the brain and the various disorders within the cranial cavity have suddenly or more gradually made the clever foolish, the patient petulant, the hopeful despondent ; have caused men and women, too, to change almost instantaneously their religious and political doctrines. When the intellect is impaired by disease of any kind, or by decay of age, men cannot distinguish the true path

as of old, even when they desire to do so. The changes on the brain from old age much resemble a diseased condition, either like the result of hemorrhage from the giving away of the cerebral arteries from thrombosis, from hardening of the arterial coats, from meningitis, congestion, from anæmia of the brain substance, from nerve tissue decay, and from softening ; and death in aged persons is more frequently a process than a sudden event, the process being one of very gradual incapacitating decline of the mental faculties. An old man may begin to die ten or fifteen years before the absolute death of his body really occurs ; and, like a tree, he may die, beginning at the top and going down to the trunk. The decline in the moral faculties in old age may be shown in studying the lives of such men as Demosthenes, Cicero, Sylla, Charles V, Louis XIV, Frederick of Prussia, Napoleon, Voltaire, Dr. Samuel Johnson, Oliver Cromwell, Ruskin, Dean Swift, Milton, Lord Bacon, Dr. Webster and Horace Greeley. Old men decline in various faculties, some becoming peevish, others avaricious ; some mean, filthy and tyrannical ; others quarrelsome, sensual, unjust, revengeful, and ungrateful for past favors and kindness.

The best average barometer for mental force is the memory, and decline or any deterioration in the power of the memory is the advance guard in old age, which sooner or later invalidates the forces of the brain. Most men show their mental powers in middle life, while their advanced years are the periods when they apply and reap the harvest of the work executed or planned in their palmy days. Thus Lord Bacon, Swift, Dickens, Ruskin, Thackeray, Carlyle, Emerson, Wendell Phillips, Graefe, Pinel, Luther, Nelson, Harvey,

Daniel Webster, Jenner, Jefferson and Washington all did their best work before old age got the better of them. Sterne said that "At sixty years of age the tenement gets fast out of repair, and Emerson says, in his "Plea for Old Age," "We cannot count our years until there is nothing else to count," and added, "We postpone our literary work until we find our literary talent was a youthful effervescence which we have now lost." Dr. Oliver Wendell Holmes says, "New ideas build their nests in young brains, and the whisperings of new truths are not caught by those who begin to feel the need of an ear trumpet." General Halleck, in his work on "Military Science and Art," shows that mainly all the campaigns of history have been fought by comparatively young men in the prime of life, and that most of the early successes of Napoleon were gained over old and worn-out generals.

In the late civil war of the States the North began with old generals and failure was the result, and the average of the later generals who finished that contest was between thirty-five and and thirty-nine years. We find the average age of the fifty signers of the Declaration of Independence was between forty and forty-five years of age.

Mr. Guernsey, of the New York Bar, said, "From twenty-five to forty-five may be considered the seed time of life; that is the time when knowledge is accumulated and stored up for future use."

There are three causes of moral decline in advanced life :

1st. Is the over-tasking and over-exercise through early and adult life of the physical and intellectual faculties; and above all early sexual excesses and abuses.

2d. Diseases of the brain or of other organs which react on the brain.

3d. Intellectual decline, or the gradual process by which all living beings decay and die.

The question of medico-legal responsibility now comes up in old age:

1st. As to cases of crime by aged persons.

2d. Cases of wills and deeds and transfers of property which are disputed on the ground of senile incapacity.

3d. When it is desired to fix the limit as to term of office, etc.

4th. As to cases of priority of invention, etc.

Corruption in business and in political life and breaches of trust are common among the old, as we see in every day's journals. Offenses which depend upon the sexual passions are not infrequent among the aged, for it is well known that in the decline of life many return to the vices of their youth. Even clergymen, old men, have been charged with such irregularities.

Cases of wills contested on the ground of senile incapacity are frequent enough, often giving rise to much trouble and estrangement among members of the same family ; and an evident presumption would often lead to an incapacity to dispose of by will wisely the accumulations of a lifetime. A man in the decline of old age may be irresponsible, more or less, in one or more directions, while responsible in others. Few men break down all at once, merely from decay of powers ; but the faculties leave one by one, as the one first becomes defective, or softened if of the brain, while the others remain for awhile longer fairly healthy, as an army in retreat moves off, some holding their position while other

regiments fall back. Thus the wear and tear of aged persons may be rapid, save where money, the touch-stone of life, is concerned, for the old man cares rather for the money, *in ipso*, than for the good that money can bring. Grudge or personal spite, unnatural enmity against a person, relative or not, often occurs in advanced age, amounting even to more than a disagreeable eccentricity, to almost a disease, and may influence even against those who have been kind and affectionate toward the individual. It is difficult and generally fruitless to endeavor to remove this prejudice. Then the aged are liable to be deceived by designing persons, and have influences exerted over them which in their better days they would have seen through or not tolerated. The case of Horace Greeley may be cited as the irresponsible condition of an old man, he becoming inordinately fond of money, as soon as disease invaded his brain, and yet he became insane the last week of his life and his will was disallowed.

When an old man, previously benevolent and wealthy, becomes in dread of the poorhouse and begrudges fuel for his family, the meat on his table and the clothing for himself and his family, there is reason to suspect very serious cerebral disturbance, which might suffice to incapacitate him from making his will.

An instance may be cited of an aged clergyman, who all his life had been mean and penurious. In his golden decade, in his thirty-fifth year, he had been a minister of the gospel, a noted preacher. Between seventy and eighty he became worse and worse, becoming a genuine nuisance. He lost his memory and his manners; lost his wife; he then married again under the most absurd circumstances;

was then divorced from the wife and again married. He then went into fiery excesses, lost his physical health, which up to that time had been excellent, and finally lost all his money, through the treachery of this last wife, who in the end deserted him in his poverty and in his imbecile condition. This man had during all these years made will after will. His friends now took him in charge and treated him as a confirmed imbecile.

Dr. Brigham, of Massachusetts, says that in this country insanity and other forms of brain trouble are three times as prevalent as in England, and Dr. Winslow, a celebrated expert on insanity, says: "In the incipient stages of cerebral softening, as well as in organic disintegration of the delicate nerve vesicles, observed in what is termed progressive, general and cerebral paralysis, ending either in apoplexy or in progressive paresis or in childishness. In such cases the patient often exhibits a debility of the mind, of body, and of memory, more especially, long before the disease of the brain is suspected, in regard to the most trifling affairs of his life. He forgets his appointments or goes to keep them before the appointed time. He is forgetful of the names of his particular friends with whom he has lived in the closest intimacy; he becomes irritable, mislays his books, loses his papers: he sits down to write on some matter of business, and his attention being diverted for the moment, he forgets and leaves his letter unfinished."

The memory may be considered one of the most delicate tests of the presence of injury or of the progress of gradual mental decay in the brain. The case is cited of an old man, who could never recollect the names of the inmates of his establishments, recall-

ing only the initial letter of each one. He accordingly kept about him a list of their names so as to indicate them.

Old age, wear and tear, will, like pressure from a bone on the delicate substance composing the brain, produce more or less complete death of the sentient being for the time. One of the early indications of softening of the brain is seen in the paralysis of the muscles of the face, the drawing down of the eyelid and the distortion at the angle of the mouth from the paralysis of the corresponding muscles of the other side.

In many instances these irregularities and extravagances are but the premonitory symptoms of softening of the brain, that terrible malady, incurable, and which gradually destroys, one by one, the powers of mind and body, and reduces the poor sufferer to a living death. Sensations as cold, numbness, pain, and of increased warmth at times may be all felt in a perverted state; in some, everything touched feels cold; others can bear only the lightest wraps in bed on the coldest night of winter.

Prof. Simpson, of Edinburgh, knew persons with incipient signs of general paresis to complain of their fingers feeling like sausages, cold and fleshy: and it is well known that on the approach of a paroxysm some have had such feeling about the tips of the fingers as to lead to the habit of biting their nails, and this habit is known to exist in many inmates of insane asylums. The manners of such people are very variable, being different only in that the feeling of numbness and inertia persist and are on the increase all the time with them; while in the adult healthy individual, if this condition comes on at all, it forms a brief attack, following generally a recognized

cause, and then leaves the party almost or as well as before the attack.

It is the opinion of many eminent physicians that there has been a large increase in brain diseases during the present century, and that this increase has occurred in an accelerated ratio in proportion as the strain in commercial and public life of the people has increased, making the struggle for position, for wealth, and even for existence even more difficult than formerly, when man's ambition was to live simply, and to follow the golden rule, thus requiring increasing struggle for the luxuries of life, which finally culminate in cerebral excitement, under which the delicately organized brain is forced to yield. Eccentricity is but a name often covering painful afflictions, and any prolonged exaggerated conditions of eccentricity may be said to constitute disease (page 89, "Work on the Border Land of Insanity," by Andrew Wynter, Esq., M. D., of London). Many mental eccentricities are but the forerunners of mental failure. The inability to grasp a stick, the continued numbness of the fingers, the loss of memory in small matters, are often indications of serious cerebral disturbance. Dr. Graves, of Dublin, a distinguished physician and writer, cites a case who could never remember proper names; and Dr. Samuel Johnson, the great English scholar and writer, the author of the beautiful selected passages in Rasselas of the "Happy Valley," would attempt in vain to repeat the Lord's Prayer in English in his later days, and yet he could repeat every word of it in Latin.

Dr. Samuel Rogers, the poet, in his later years showed peculiarities of memory, very like those of persons known to be suffering from disease of the brain, he even forgetting he had been a poet. This is an uncommon form of loss of

memory, for once a poet a man thinks himself a poet forever. Throughout history, from the ancient fathers to our own times, we find like failures for the period of old age. We need only cite the famous John Randolph and that great jurist, Samuel Tilden, of New York.

In the Bible we read of David and the follies of his old age ; of Solomon and his foibles with the fair sex ; of the valor to-day and the cowardice to-morrow in his flight from Mt. Carmel ; all in the extreme old age ; of Moses, the lawgiver, who organized the Mosaic code, finally disappearing and wandering in the mountains, lost to memory and to history, so that with all his legal lore he had not the mother-wit to keep his bearings or to leave his final testamentary evidence for future generations.

It has been said in this trial that many cases might be cited in green old age, where great ability and wonderful acumen were maintained even to the day of death. Such cases when seen at all are like angels' visits, few and far between, and "they stand out like meteors in the midnight sky."

Now comes a review of the last great

"Scene of all  
That attends this strange eventful history,  
Is second childhood, and mere oblivion—  
Sans teeth, sans eyes, sans taste, sans every-  
thing."

And we may add to this doleful picture, sans will, sans memory and sans care for those who loved him.

See the picture of this poor old man, shrunken ; not in his locomotive power alone, but in mind and failing in his powers of memory, without which the noblest work of the Creator becomes useless, helpless, motionless and reasonless, on the tide of life ; is at the mercy of the slightest breeze by friend or foe—whichever most caters to his present whims ; or like the feather tossed by the stormy waves, it was something once, but wilted and weighed down by the moisture of the sea, it becomes but a creature

of chance. This old man was lame, blind, toothless, and his "voice had fallen in tone from the mighty starboard watch ahoy !" to the childish, feeblest piping and whistling, like the tiny reed, or like the creaking door in its strength, left to rust and droop, until no longer with any to care for it, in the end it tilts and falls, carrying as it comes down.

On top and above all these threescore years and ten, he suffered from the grippe, which takes its name from the French word "tongs," or "seizings." The French are very *au fait* in their use and application of the proper words. This disease is known to the Italians as "influenza;" to the people of the South as the "dengree," or breakborn fever, and in England as the "epidemic bronchitis." It is fearful in youth, prostrating to adults, and fatal in old age.

In connection with all this disability, lasting many months, this old man attempts to publish his will. Often then he says to his brother and to his older sister, "Don't you worry ; I have already provided for you." He thought he had made this provision, no doubt, but on the contrary he utterly forgot to mention them. Poor old man ! His good intentions took the place of good actions, which he thought performed, until at last he had neither will nor memory, but existed like a plant, simply on the sap that was left and the light of other days. This honorable jury must forgive him, for he knew not what he did, being irresponsible, and living on the visions, the ignus fatuus of past recollections, and merely a creature of habit and repetition.

Thus his constant effort in business was a mere matter of habit, and but the shadow remaining of his former good intentions towards those who were justly entitled to his beneficence. He did not even recollect the amount of his income, nor did he provide for over one-third of it and the little he did attempt to will he

divided among those he had forsaken.  
His memory was but a fume, a mist, like  
the froth on the beer glass, now present

like a bubble, and then gone to rise no  
more.

(*To be Continued.*)



## Editorial

THE MEDICAL TIMES AND REGISTER is published monthly.

All communications, reviews, etc., intended for the editor should be addressed to 367 ADAMS STREET, DORCHESTER, BOSTON, MASS.

THE MEDICAL TIMES AND REGISTER is published by The Medical Publishing Co 1400 Arch Street, Philadelphia, Pa., to whom all remittances should be made by bank check, or postal, or express money order.

Subscription price is \$1.00 a year in advance. Foreign countries, \$1.50. Single copy, 10 cents.

Advertising rates may be had on application at the Philadelphia office.

Original articles of practical utility and length are invited from the profession. Accepted manuscripts will be paid for by a year's subscription to this journal and one hundred extra copies of the issue in which such appears if desired.

Reprints of Original Articles are not furnished except on payment of cost price by the author.

Entered at the Philadelphia Postoffice as second-class mail matter.

---

### TREATMENT OF JACKSONIAN EPILEPSY BY THE USE OF BLISTERS AND REVULSIVES.

M. Huyghe publishes an important note on revulsion in epilepsy. The bromides he notes may produce some amelioration of recent epileptic manifestations. Trepannation has had its triumphs; but it produces few durable cures, and hence we may well pause before we resort to sanguinary procedures, when we know the uncertainties of their effects.

But we may any time with safety and security test the usefulness of revulsives, though they belong to the therapeutics of antiquity. Under the form of "sympathetic" epilepsy, Jacksonian, the ancients employed moxas, setons, caustics, leeches and blisters. (Galian DeLoc. eff. chap. v. t. iii.)

Racamier, of the modern school, revived the use of revulsives in epilepsy, and reported several remarkable cures: Brevais and Firè recommended highly revulsions, particularly in the traumatic variety of epilepsy.

The writer has noted the record of several remarkable instances of cures or marked amelioration of cases of epilepsy by the use of blisters, some of which are here briefly enumerated.

Observation I, patient 55, at 12 years sustained blow from a stone on the head, over the vertex, leaving a large scar. No hereditary history. Had good health till 42 years old, when he was suddenly seized in church with painful spasmodic seizure in left arm. These seizures now returned with increasing frequency and severity, six or seven times a day. At 50 years the right lower limb became involved, and sharp flashes of heat were felt radiating through the scar. A year later his memory became affected, while the convulsive seizures became generalized.

This was the epoch when post-paroxysmal phenomena became manifest; the left leg remained paralyzed after each attack for an hour or more;

this monoplegia was attended with muscular contraction in other parts. This might occur once in three days, or he might have a dozen seizures in one day.

Treatment was begun November 7, 1898. It consisted in the application of blisters over the psychomotor areas of the brain. Two months after the convulsive seizures diminished in frequency, they now occurred but once a week; finally, they all permanently ceased in May, 1899, and have not recurred.

**Observation II.**—Patient, 48; male. At the age of 23 was thrown from a carriage, striking on his head over the left parietal region. In this case also no history of heredity. Six years later patient seized with convulsions and loss of consciousness, spasms beginning in the right arm. Finally, after two years the convulsions became generalized. In 1897 seizures appeared every five days. Treatment by blisters begun June, 1897; blisters renewed every eight days. Improvement immediately noted; now has but very slight seizures, one every ten days.

**Observation III.**—Case, child brought to me in December, 1898, for consultation. Normal conformation, but intellectual development very defective. Since two years old had epileptic seizures every week. These were followed by dullness and stupidity. The child indistinctly babbled a few words; conduct capricious, without expression; idiotic expression. I concluded that the intellectual obtusion was epileptic. I avowed my belief to the mother that I feared confirmed idiocy, though promised that if it resulted from epilepsy much good might follow free blistering. Repeated applications of blisters made over the psycho-motor cen-

tres. Six blisters had been applied. In six months the change noted in this child was something marvelous. His whole personnel was improved in a remarkable degree. The attacks had ceased, his intellect had cleared up, and he was now learning rapidly to speak. (Le Nord. Med. 15 April, 1900.)

**NOTE.**—Other cases are recorded, no less remarkable than the preceding. The observations of Brevais, Ricamier, Buzzard, Pitre and Lemoine are dwelt on at length and the modus operandi is considered. It is believed that the vesicant acts by selections on the cortical cells, in this manner subduing the contractures and pain, and moreover inhibiting the phenomena of the spasmodic reflexes.

Some apply the blister to the affected limb, the wrist, the ankle, knee or elbow, but now it is generally believed the most efficient to apply the cantharides directly to the shaven scalp.

Knowing, as we do, the general impotency of surgery and uselessness of internal medication in these sad cases, treatment by counter irritation should be re-established and tested on an extended scale.

T. H. M.

M. Carlier presents some important notes on bladder growths. *Valeur de l'intervention Chirurgical dans les tremeurs de la vessie.*—Societie Centrali de Medicine du Nord, April, 1900.

His first patient was nearly exanguinated, when he first saw him, from free urethral hemorrhage. The urethra was nearly obliterated by clots. Artificial serum gave but little amelioration. The bladder was now opened, when a tumor as large as a fortal head presented. It was a pedunculated polypus easily detached. The versical walls were now completely sutured

and catheta left in the urethra. Rapid recovery. In thirty cases examined M. Carlier operated twenty times for vesical tumor. He believes in all cases of bladder tumor we should operate. He says that symptoms alone will not always enlighten us on the character or extent of the tumor.

A young man of 19, after several spells of urinary trouble, entered St. Savener Hospital. On opening the bladder a large tumor came into view, attached by a pedicle to the summit. This was removed. Examination of tumor showed that its elements were made up of malignant sarcoma; but twelve months after he is in excellent health and with no sign of relapse.

In another patient of 55 this surgeon saw a tumor of large dimensions, which developed slowly, determining in the meantime a very painful cystitis. In this instance emencleation was practiced, the bladder being closed

by two planes of sutures.

In conditions of neoplasm of the bladder Carlier insists that an early, definite diagnosis is important, that the patient be not fatally exhausted by loss of blood or by infection, before operative interference is invoked.

M. Carlier is a strong advocate of immediate closure of the incision into the bladder by two rows of suture. He says that by drainage through the urethra, the wound usually closes from eight to ten days.

**Note.**—There is no department of surgery which has made such advances in modern times as that involving the bladder, kidney, ureter and urethra.

In intra-vesical operations the immediate closure of the wound in the bladder wall and abdomen has been a most notable and invaluable procedure in the absence of pus.

T. H. M.



## WHITE SWELLING IN THE CHILD.

M. M. Phocas and Boaldieu, Le Nord Medical, 15 April, 1900, present an important thesis under the above title. They submit that many believe that the primary lesion is in the bone.

Koenig alleges that the synovial membrane is first involved, while Lanne-longue believes that tubercular osseous asthritis is the starting point. There is no question, but in the child the synovial structure is first involved, and hence why in asthrotomy, the fungosities should be well cleared away, at the same time we should search sedulously for osseous softening and purulent deposits in the cancellous heads of the bones. It is rare that we find the patella involved.

On opening the joint we will find the skin thin and wasted, the cellular tissue indurated. On opening the joint we came on the thickened synovial membrane, with sero-purulent fluid within. Fungous material is found under the patella and the sac of the quadriceps. The pus found is the degenerate remains of those fungosities. In this disease we may find peri-articular abscess of a synovial origin, osseous or ganglionic. The most frequent are external, femoral or internal, tibial. A popliteal abscess may be due to suppurating ganglia, through an advance of pus outwards from the distended capsule. The ligaments and interior of the capsule usually escape infection.

Osseous lesions are the most serious. They are of two orders. Sometimes there is an abscess with sequestra, or a tuber-

culous cavern. The sequestra may be seated in the cancellous or compact tissue, or between them, in the head, epiphysis or diaphysis. Sometimes tuberculosis is diffused, spreading widely through all the tissues. As we make a section through the osseous parts, we will observe that low down, there are infarcts varying in volume from a pin-head to a lentil or haricot. These are masses of inspissated tubercle. The vicious attitude and pathological luxation in white swelling has been an object of extended study by Guillemain. These de Paris, 1893. They are also well described in Bonnet's treatise on the diseases of the joints, by Volkau and Sonnenburg. There are many vicious attitudes. Radiography has been employed in these lesions of the joints, but its elucidations are often indistinct (authors here give several photos from the radiograph), they show practically nothing.

**NOTE.**—White swelling is always a very serious affair when the soft heads of the bones are involved; as its course is gradual, at first insidious, and when arrested usually leaves a stiff joint, or a deformed and wasted one. Judicious surgery supported by a proper environment will do much for these cases; but resection is never to be considered unless the ravages of the disease have been so great that the question of amputation is raised. When only the synovial envelope is involved intra-articular injections of iodoform often arrest the disease.

T. H. M.



## SOCIETY REPORTS

### NEW YORK ACADEMY OF MEDICINE—SECTION ON ORTHOPAEDIC SURGERY—MEETING OF APRIL 20, 1900—RESECTION OF THE HIP.

Dr. B. F. Curtis presented a boy 13 years old whose right hip had been resected for tuberculous arthritis of seven years' duration. The hip was fixed in dorsal dislocation with the typical deformity of adduction, flexion and inward rotation, and three sinuses existed on the posterior, anterior and internal surfaces. There was slight flexion and extension, rotation was diminished, abduction possible to ten degrees. Operation by posterior incision, Sept. 26, 1896. Resection of head and three inches of femur. The pelvis was found healthy. The sinuses were curetted, the wound partly sutured, partly packed, and a good recovery followed. A Buck extension apparatus was applied and the limb kept in slight abduction. Nov. 16th, a hip splint was applied and the patient allowed up. The sinuses had healed by Nov. 23d and Dec. 11, 1896, he was discharged. There was four inches of shortening, the limb was in good position, the upper end of the fragment being strongly united with the pelvis at the level of the acetabulum, with no slipping. A limited amount of flexion and extension was possible, but no rotation. There was no sign of recurrence, the patient was well and walked with a cane. He wore the splint for

a few months after leaving the hospital.

#### OSTEOTOMY FOR DEFORMITY FOLLOWING HIP DISEASE.

Dr. Curtis also presented a boy 17 years old who recovered from hip disease with the hip flexed to ten degrees, about ten degrees of flexion and extension allowed about that point. No rotation. On Dec. 23, 1897, there was no sign of active disease, and an incision was made through the soft parts in front, below and parallel to Poupart's ligament, dividing everything down to the joint, including its capsule and excluding only the vessels and nerves. This allowed extension to forty-five degrees, the tension of the vessels not warranting more. The femur was then partly divided by the osteotome and partly broken above the lesser trochanter, its posterior layer being left. Full extension was then possible. The large wound was covered by a flap from the abdomen and a Buck's extension was applied. Hemorrhage the following night was controlled by packing and extension was removed. Infection followed with complete fracture and over-riding of the fragment and partial sloughing of the flap. The second day extension was re-applied

and the bone set. On Jan. 20, 1893, the wound was clean and grafting was done over the large granulating area. By the end of February the wound was healed, with shortening of two inches. On March 19th a hip splint was applied. The boy was walking without a brace. There was practically no motion in the joint. Bony union was firm. The deep depression at the site of the wound caused no inconvenience. The brace was occasionally re-applied for a few days for some pain in the hip.

Dr. A. B. Judson said that operating in hip disease was less likely to be followed by a bad result in an adult than in a child.

Dr. G. R. Elliott said that the relation of these cases emphasized the importance of preventing the need of such operations, which should never be required. They indicated gross negligence in the treatment of the disease giving rise to the deformity. Patients with hip disease drift through general hospitals and come out with badly displaced limbs from the absence of adequate treatment. In an institution which he attended surgically there were a dozen cases of old hip disease with limbs at all sorts of angles, showing that no care had been taken in hospital and private treatment to keep them in proper position while the bone was breaking down and undergoing repair. The prevention of these deformities was not difficult.

Dr. W. R. Townsend recalled a similar case of osteotomy. After dividing the soft parts by an open incision including the capsule it was found impossible to get the limb down. The capsule was allowed to heal before osteotomy was done which he thought was better than to complete the reduction at one sitting.

#### TREATMENT OF TORTICOLLIS.

Dr. Townsend presented a girl 12

years old who had been relieved of torticollis, the result of suppurative cervical adenitis at the age of 5, which had produced cicatricial adhesion to the left sterno—cleido—mastoid muscle. The head had been pulled over toward the left shoulder and the deformity had been increasing for four or five years. On Feb. 1, 1900 an open incision  $1\frac{1}{2}$  inches long, about 2 inches above the clavicle over the belly of the muscle, and free section of all the resisting structures, had relieved the deformity. The head had been held in the opposite position by plaster bandages. There had been no pain, the temperature had never been above 99 degrees and the wound healed by primary union. The result was satisfactory. The head was in good position with motion. A little gap was felt below the scar but the muscle had probably united. Subcutaneous tenotomy would have been impossible as as it had been necessary to carry the incision to a point where no one would have dared to go. In general he preferred the open incision for division of this muscle.

Dr. R. A. Hibbs commended the open incision. In a recent operation on a girl 5 years old after section of the sternal portion of the muscle the deformity was only relieved by division of the clavicular portion through another skin opening.

Dr. R. Whitman practised the open incision in torticollis. Complete division of all contractions, correction of the secondary distortion by vigorous manipulation, fixation for a time in the over-corrected position by a plaster bandage and after treatment by proper exercises would secure good results without the subsequent use of apparatus.

#### Spondylitis deformans.

Dr. Whitman presented a man 46 years old with a spine ankylored ex-

cepting the occipito-axoid joints. Fourteen years before, a long and severe attack of inflammatory rheumatism had affected nearly every joint excepting those of the back. This and several milder attacks in the next 9 years had been coincident with gonorrhoea, which had been absent the five years, while rheumatism had involved the back and with a persistent "lumbago" the entire spine had become rigid. There was pain in the loins and under the shoulder blades, increased by walking and by jars. The patient was nervous and irritable and easily startled and felt as if the forehead were clasped by a tight band. His equilibrium was disturbed by the forward projection of the head and by the obliteration of the normal lordosis, so that he felt himself constantly inclined to fall forward, whether sitting or standing.

Dr. Elliott asked whether gonorrhœa was excluded as a cause.

Dr. Whitman did not know whether the so called rheumatism which had involved the back was gonorrhœal in its origin or not.

Dr. Elliott asked whether the deformity was bony or fibrous.

Dr. Whitman thought it was partly fibrous and partly bony, an ossifying periostitis. The spine was not entirely rigid, as there was discomfort on changing the position, although motion could not be demonstrated. He intended to try suspension as an experiment.

#### HÆMARTHROSIS OF THE KNEE.

Dr. Hibbs presented two brothers aged respectively 11 and 15 years. There was marked effusion and limitation of motion, without reflex muscular spasm, in both knees of the older boy and the left knee of the younger. The swelling was marked. The patients were first seen in July, 1899,

weeks after the older had a hemorrhage from the lips accompanied by what was evidently an acute hemorrhagic swelling of both knees. Elastic knee caps were ordered with immediate comfort and the boys were not seen again until recently. A feature of the history of each patient was that bleeding had occurred from various organs at intervals of one, two and three months and that with each recurrence walking was rendered impossible by the tense and painful swelling of the knees. No other joint had been affected. Their father had died of some acute disease and their mother was living and healthy. Two haemophiliac brothers had died in infancy but a sister was living and healthy. The synovitis caused by the hemorrhages had been prevented from resolution by their frequent recurrence. The effect of applying pressure would be observed.

Dr. C. A. Elsberg recurred to the case reported by him at the meeting of the Section held on Oct. 20, 1899\*. A boy two years old had hemorrhage into the knee and three or four weeks later similar occurrences in three of the finger joints, in a family in which the male children of healthy mothers had been haemophiliac. An elastic knee cap had been applied and the child was fed on gelatine for a while on a theoretical rather than on any other basis. The patient was seen once a month, and the blood in the knee was gradually absorbed, leaving the joint in a practically normal condition. He would continue to wear the knee-cap, removing it only at night. There had been repeated hemorrhages under the skin but no return of bleeding into a joint.

Dr. H. S. Stokes said that haemophilia was generally transmitted through the mother to her male offspring, the daugh-

\*See THE MEDICAL TIMES AND REGISTER, January, 1900, p. 7.—ED.

ters, like their mother, showing no sign of the condition, although their male children were almost certain to be haemophiliac. The recurrence of swelling of the joint did not necessarily indicate another hemorrhage. A subacute or chronic synovitis was set up by the extravasation and more or less imperfect absorption. After a hemorrhage, treatment should be prolonged to promote and terminate absorption. The general treatment should receive attention and rest, immobilization, pressure, strapping and counter-irritation should constitute the local treatment.

Dr. Hibbs said that, if done, strapping would have to be continued indefinitely as the knees in his cases were swollen all the time. The effect of one hemorrhage did not disappear before the occurrence of another.

#### A RUBBER SPLINT SHOE.

Dr. H. J. Bogardus exhibited a hip splint which was shod, not with leather but a piece of the rubber tire in common use on the wheels of road vehicles. The tires were made in widths, varying by one-eighth inch and in length about thirteen feet, of which the waste ends were suitable for this purpose. A piece could be cut off with a wet knife blade and fastened on easily and most securely by the ingenious and yet simple application of a couple of screws. In economy, durability and noiselessness the shoe commended itself.

#### ADDITIONAL MECHANISM FOR THE HIP SPLINT.

Dr. Hibbs exhibited a modified hip splint. The upright was a hollow rod

constructed in the usual manner, excepting that it reached the ground and ended in a foot piece suitably shod for bearing the patient's weight. It also had a slot on its inner side which permitted a sliding rod to carry a second foot piece, not shod, to which were attached the leather traction straps. The sliding rod had at its upper part a rack moved by the usual pinion or key, and at its lower part a veritable ratchet and spring catch. When the patient was recumbent traction was made by the key and secured in the usual manner, and when the patient stood the downward pressure of his foot on the movable foot piece took in the slack of the traction straps, the additional traction thus made being retained by the automatic action of the spring catch of the ratchet.

Dr. Whitman said that the arrangement was much better than the ordinary one, but a disadvantage was that the brace could not be made longer and therefore would be outgrown in a short time.

Dr. Hibbs said that when the upright of the ordinary splint was lengthened with the key it was thus weakened, and had also to be replaced by a longer one.

Dr. Judson said that the additional traction gained when the patient was erect would prove to be too much when the patient lay down again.

Dr. Hibbs said that when necessary, which would not often happen, the extra traction could be relaxed by the attendant, or the patient could loosen the buckles of the perineal straps.



## TERAPEUTICS

In charge of H. B. SHEFFIELD, M. D., New York.

### SOLUBLE SILVER SALTS.

Of late some soluble silver salts have been proclaimed as the sheet anchor of antisepsis in many forms of septic fevers.

B. Crede's first publication on "Silver and Silver Salts as Antiseptics" appeared in 1896. That pamphlet was followed by many journal articles since, also by a paper read by him during the meeting of the Moscow International Medical Congress in 1897. His experience with them extends over many thousand cases and has often been renewed and extolled by observers of all countries. His followers are sometimes more enthusiastic than he is himself though his own convictions approach sometimes the fervor of fanaticism. Crede first tried the lactate of silver (in the trade called actol), and the citrate of silver (itrol), which are non-poisonous and efficient antiseptics, but require too large dilutions for subcutaneous injections and cannot be employed in strong solutions on account of their forming insoluble combinations with the albumin of the tissues.

So he applied to chemists who produced for him metallic silver in fluid form changing in the body into the antiseptic salts. This "colloidal silver" is almost entirely soluble in water and albuminous fluids, and apparently hinders the development of and destroys certain pathogenic germs, viz., staphylo and streptococci, to such an extent as to very often effect a rapid and absolutely surprising cure in recent cases, and also in chronic ones, such as slow septic and furunculosis, where secondary changes of vital

organs, such as abscesses, or gangrene, have not occurred.

The first form of the drug recommended by Crede was an ointment which goes by his name containing fifteen per cent of metallic silver, three grammes of which are a dose for an adult, one gramme for a child. It takes twenty or thirty minutes to be fairly well rubbed into the skin. In average cases a single inunction, in severe cases several, in chronic cases from five to twenty inunctions were required to cause a decided improvement in the symptoms.

The internal administration of colloidal silver is resorted to mainly where there is a contraindication to inunctions. Crede orders pills of 0.01 with 0.1 of milk sugar, with glycerine and water, two of which are taken two or three times daily. Improvement is said to be immediate. Chronic cases, for instance tuberculosis, require one pill twice a day. No argyriasis was observed after many months.

For subcutaneous use a solution in 200 parts of water was employed for fungous and tuberculosis processes in which it is customary to make iodoform glycerin injections. The dose is from one-half to two grammes every week or two. Externally it may be used in a solution of one in 5,000 to 10,000; solutions of one in 2,000 are said to prevent the growth of staphylo and streptococci in the culture tube.

The internal administration of colloidal silver meets with difficulty when the stomach is acid. In that case the drug

is decomposed. This does not occur with egg albumin, which is prepared by bottling the white of an egg with equal parts of glycerin. The prescription is one to four parts of colloidal silver, 200 to 800 parts of distilled water, egg albumin one to four; a tea or a tablespoonful three times daily with a glass of water. Sugar may be added. Rectal and intravenous administration has also been resorted to.

This is the preparation which is claimed to relieve or to cure phlegmon, lymphangiectasis and lymphadenitis, phlegmonous angina, foetid bronchitis, peritonitis, furunculosis, erysipelas, puerperal fever, gonorrhœal and articular rheumatism, tuberculosis, scarlatina, diphtheria, typhoid, gonorrhœa, etc. At all events this is the class of cases in which that soluble and non-injurious antiseptic is expected to be serviceable, and there are many reports that appear to prove the justifiability of its claims, at least to a certain extent. The careful practitioner who has seen many rockets to rise like stars and to descend like sticks, will do well (to judge from what I have seen myself), to try the colloidal silver for what it may be worth. We have all been looking for a soluble antiseptic which would kill cocci and toxins without harming the

tissues. In this drug we are promised such a material. We are not bound to accept the dicta of enthusiasts bent upon writing an article that will carry their names through the ephemeral literature of a brief half year. On the other hand we need not condemn like Conrad Brunner and Carl Meyer, who in a big book lately proved to their satisfaction that the claims of Crede were not at all sustained by the facts. That happened this way. Crede expressed the hope that bacilli would be as amenable to the action of his silver preparations, as cocci, and was once led away to say that "all microbes were killed by colloidal silver in five minutes." Our clever authors found that lactate of silver (not the colloidal) one in 1,000 could not kill anthrax in three days, and the citrate did not destroy staphylococcus aureus in sixty minutes. They need not have disproved what was not claimed. My own experience is limited to a few cases of phlebitis, puerperal fever, and pyæmia. I am sufficiently impressed by it to make further experiments, not relying on colloidal silver alone, but supporting it with aid of stimulating and supporting treatment, and that of the knife in appropriate cases.—*Albany Medical Annals.*



## THERAPEUTICS OF UROTROPINE.

The important place which urotropine has attained in genito-urinary surgery is exemplified by the fact that it was made the subject of a special paper by Dr. E. L. Keyes, of New York (*Philadelphia Medical Journal*) at the recent meeting of the American Congress of Physicians and Surgeons. Among the instructive cases reported by the distinguished author, there was one of persistent anuria following external urethrotomy which was at once relieved by the use of the drug, the symptoms again appearing when it was discontinued. Dr. Keyes always uses urotropine when urinary chill is present, or is threatened, and it appears to be almost a specific in acute catarrhal pyelitis. Large doses may be necessary at first, these being followed by long-continued smaller doses. As a prophylactic against urinary chill, urotropine is highly recommended. Attention is called by the author to the fact that in some instances the drug caused dysuria, or that urine passed during its administration had an irritating effect on wounds with it came in contact. This, it seems to us, is only likely to occur under the use of very large doses, and especially where the patient does not receive an adequate amount of water, so that the urine becomes highly concentrated. Dr. Keyes, however, instances a case of enlarged prostate in which  $6\frac{1}{2}$  grains were given daily for months, and the patient rendered perfectly comfortable. According to Nicolaier, who has made the most thorough experimental and clinical study of urotropine, a daily amount of 15 to 22 grains is usually sufficient to obtain the desired therapeutic effect, and he advises that each dose should be dissolved in at least one-half pint of water. If larger doses

are employed the quantity of water should be correspondingly increased.

The utility of urotropine in genito-urinary surgery is well summed up by Dr. W. T. Belfield (*Progressive Medicine*, Dec. 1, 1899), in the following statement: "Urotropine is of extreme value to the surgeon also, giving him the ability to secure, before and after operative measures, that ardently sought 'asepsis of the urinary tract' hitherto usually unattainable. The drug should be administered for several days before and after every operation upon an infected urinary tract."

## TREATMENT OF DIPHTHERIA.

BY H. J. LACIAR, M. D., BETHLEHEM, PA.

I have used Syrup Hydriodic Acid (Gardner) during the past three years, in all my diphtheria cases with most satisfactory results.

I do not displace Anti'oxin with it, but employ it in conjunction.

In one case of a child of say, six years of age, I administered about three ounces in every twenty-four hours, sometimes ordering one fl. dram every hour, in other cases, two fl. drams every two hours, and in all cases, inject 2000 units of Antitoxin, as early as possible.

I have induced quite a number of my local colleagues to employ the same treatment, and so far as I know, with equally satisfactory results.

In not a single instance have I seen any unpleasant effects from the administration of so large a quantity of the remedy.

I have administered no other medicine, with the exception of strychnine occasionally, in any of the cases I have treated in this way.

I fell upon this plan of treatment in the following manner: knowing that

iodine and the iodides are largely eliminated by the salivary glands, that they are excellent antiseptics, and that in the Syrup of Hydriodic Acid the iodine is in combination with an innocuous base, I selected this preparation for the treatment of a very severe case of laryngeal diphtheria which I was called upon to treat, and decided to administer large doses, believing that by so doing, the mouth and throat would be constantly bathed with an antiseptic solution, and my result was, the pleasure of seeing the first convalescence from this form of disease in an experience of about sixteen years.

Since that time, I have employed the same plan of treatment in all my cases, with uniformly good results.

#### WHY I USE PEPTO-MANGAN "GUDE" AN EXPERIMENTAL DEMONSTRATION.\*

BY WM. KRAUSS, PH.G., M. D., MEMPHIS.

Director of the Microscopic Laboratories,  
Memphis Medical College; Pathologist and  
Visiting Physician to St. Joseph's Hospital,  
etc., etc.

Some five years ago I wrote a paper for the *Memphis Medical Monthly*, giving a resume of the evolution of the iron compounds, and appended a report of cases giving blood counts, etc. The manufacturers of the preparation I preferred saw fit to reproduce the case reports in their pamphlets, but said nothing about the reasons that induced me to prefer their product.

At a recent joint meeting of physicians and pharmacists I was criticised for opposing the use of ready-made compounds, while still advocating the use of Pepto-Mangan "Gude," which is a proprietary preparation. I hesitated considerably about bringing the matter up again, because I dislike to build up a reputation as

an endorser, and have never in any other instance written an article endorsing a proprietary preparation.

I hope, however, to show you this evening that there is no pharmacopoeial preparation that meets the requirements of an ideal iron compound, and, until this is found, I intend to continue to use what has never disappointed me, and is not based upon mere faith. The work of Bunge is too well known to be now quoted, and I will only make a few experiments before you this evening and show the reasons for the faith that is in me. There may be other proprietary compounds, and doubtless there are, that will come up to the same requirements, but I see no advantage in swapping the devil for the witch. It is not necessary to repeat all the tests with all the official iron preparations, because they are divisible into groups, all the salts of one group behaving very much alike toward the gastric and intestinal juices.

An ingenious theory recently put forward regarding the action of the mineral salts of iron is, that they decompose the substances in the intestinal tract which precipitate the *food iron* so that it may be absorbed. This is the only rational explanation of the fact that we do occasionally get results from them. On the other hand, it is far more rational to use an iron compound that can be, and is absorbed, for then we are reckoning with known quantities, instead of blundering along, giving more iron at a dose than is contained in the entire body, and incidentally deranging the digestive functions by precipitating the gastric, pancreatic and intestinal juices, and producing constipation by reason of the very astringent nature of some of the iron salts.

Beginning with organic double salts, of which the scale salts are representatives, we notice upon the addition of this gastric juice, that a precipitate is formed; the double salt is decomposed and ferric last

\*Read before the Memphis Medical Society.

remains, which is insoluble, both in gastric and intestinal juice.

The tincture of ferric chlorid will precipitate some of the gastric constituents, though most of the iron will remain in the solution in the hydrochloric; the iron still in solution will not be absorbed, because its non-diffusibility is taken advantage of in the manufacture of *dialised iron*, the acid passing through the animal membrane; when the iron finally reaches the intestine, the alkaline carbonates promptly precipitate it. Ferrous sulfate behaves similarly. In both instances, as you see, the very insoluble ferric oxid is finally formed. If you have ever tried to remove iron stains from your water pitcher, you have some idea how insoluble it is.

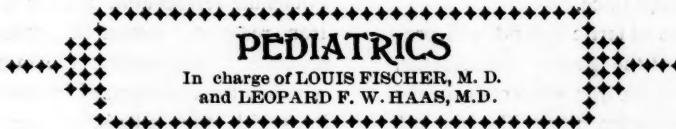
The insoluble compounds, like reduced iron, or Vallet's mass, only serve to render inert the arsenic with which they are usually prescribed; if dissolved at all in the stomach they are re-precipitated in the intestine.

Taking now Gude's preparation, we find it soluble, not only in all these re-

agents, but also in a mixture of them. Potassium ferrocyanid readily gives the iron reaction, excess of ammonia will separate it, redissolving the manganese, which is then recognized by the color of its sulfid; the alkaline copper solution gives the reaction for pepton, showing that it is what the label says. It mixes with arsenious acid, forming a perfect solution, thus giving us a most useful hematopoietic agent. The soluble alkaloids are perfectly soluble in it, as is also mercuric chlorid. Being a pepton it is readily diffusible by osmosis.

The only disturbing agent in the intestinal tract is hydrogen sulfid; this will precipitate it, but presumably, much of the iron must have been absorbed before it encounters this gas; if not, appropriate agents should be used for its elimination.

Therapeutically, it does not nauseate, constipate, discolor the teeth, precipitate the digestive agents, nor become inert from contact with them. As to the clinical results, I need not add anything to the many reports already on record.



## PEDIATRICS

In charge of LOUIS FISCHER, M. D.  
and LEOPARD F. W. HAAS, M.D.

### ECZEMA IN CHILDREN.

J. H. Rille (Wiener Klin, Rundschau) dwells upon the importance of making a correct diagnosis of this trouble in children, and of determining upon its exact cause, before we can treat it rationally. Bacteria, scrofula, ricketts, pediculosis, and other constitutional and local disorders are instrumental in causing eczema. Of course it would be folly to treat a case due to ricketts without endeavoring to correct the constitutional disturbance.

The different varieties of eczema need different therapeutic measures. The delicate skin of infants and young children makes it imperative for us to protect it from injury. For example, in intertrigo, soothing powders or ointments, and careful bandaging are to be employed. In severe cases with much itching, weak applications of salicylic acid, ichthyl, aluminium acetate, or resorcin are useful. If the intertrigo becomes gangrenous it is converted into a surgical case, and must be treated accordingly with anti-septic irrigations and compresses. In acute artificial eczema antipruritic remedies followed by Lassar's paste are useful. In cases with oedema, Rille is partial to acetate of aluminium. Moist eczema he treats with a daily application of one per cent silver solution, in addition to oil of cade.

In universal eczema the entire body is thinly coated with vaseline and dusting powder applied over this several times daily. Later Cod liver oil is

applied, but this is disagreeable on account of its odor and irritating qualities.

The author does not approve of vaccinating a child suffering from eczema, because the diseased areas are liable to become infected, in which case large unseemly scars will be left. He also reports cases of chronic eczema which have been cured by intercurrent exanthematous infections.

In cases of eczema due to rachitis we generally advise a single washing with oat-meal water, then thorough drying, followed by the application of a smoothing ointment or dusting powder. In addition we give Phosphorus and Cod liver oil, or in cases of long standing Fowler's solution in small doses. After the first washing, no more water is allowed except at very infrequent intervals.

### HEAD NODDING AND HEAD ROTATION.

Dr. Miller read a paper with this title at the last meeting of the American Pediatric Society, 78 cases of this trouble have been recorded in medical literature. The affection consists of a rythmical nodding of the head, generally combined with slight rotary movements. These may or may not persist during sleep. The condition is frequently complicated by nystagmus, while convulsions and strabismus are less common.

In Miller's cases the cause seems to have been traced to gastro-intestinal disturbances, and improvement was generally noticed after the dietetic condition were changed. He is a firm

believer in fresh air and salt water, baths, in fact in general anti-rachitic measures. Bromides were of little avail.

The nodding was thought by some, to be due to the uncertain line of sight, and bandaging was suggested to cure it. However very few good results could be claimed for this method.

The concensus of opinion in the discussion of this paper seemed to be, that, the disease was a functional one due to exhaustion, and that rachitis was the principal predisposing factor.

#### NEPHRITIS WITHOUT ALBUMIN OR CASTS.

Cassel describes a number of cases in children which presented the appearances of nephritis, but in whose urine there was not even a trace of albumin, and no casts could be found. The cases presented a general oedema, while in three of them ascites was present. The urine was pale in color, acid with very low specific gravity, and no sediment. Three of his nine cases were fatal and autopsy showed anatomical changes in the kidneys. He agrees with Henock that these are cases of true nephritis, in spite of the fact that neither albumin nor casts could be found. In these cases of so-called "idiopathic or essential oe-

dema" our prognosis should be guarded, and the case treated as one of nephritis.

#### GROWING PAINS.

Rheumatism is generally considered to be an unfrequent affection in the early years of life. This however is not the case. Were we to ask mothers whether their children ever had any growing pains, we would receive an affirmative answer in a great many cases.

Growing is a physiological process and is not painful, the opinion of the laity notwithstanding. These pains are really rheumatic manifestations, and should be treated as such. In all cases of cardiac disease in children, the physician should be careful to elicit from the mother, whether the child ever suffered from Rheumatism, or ever had growing pains. With this knowledge we can very often trace the origin of many cases of idiopathic endocarditis.

E. M. Brockbank in the *British Medical Journal*, emphasizes this fact and reports a number of cardiac cases, which gave no history of rheumatism, but which had been afflicted with growing pains.

L. F. H.

PUBLISHER'S MISCELLANY.

A NEW ROMANTIC NOVELIST.

"The Century Co." announces the discovery of a new romantic novelist in a young New Yorker, Miss Bertha Runkle, whose maiden effort is to be "The Century's" leading piece of fiction for the next eight months, beginning in the August number. It is described as a dramatic romance of love and adventure, and is entitled "The Helmet of Navarre." The scene is Paris during the siege by Henry of Navarre, and the action occupies but four days of the week preceding the Sunday when Henry entered the city to give his adhesion to the Catholic Church and accept its ecclesiastical rites—the occasion of his saying that Paris was worth a mass. The story is full of vigorous action, and the plot is said to be one of fascinating interest. Among the characters of the story are the king himself, the Duke of Mayenne who commanded the city during the investment, and a hero and heroine of much attractiveness.

Miss Runkle is the daughter of Mrs. L. G. Runkle, a lady of large literary attainments, well known by her editorial connection with the "New York Tribune," and as one of the working editors of the "Library of the World's Best Literature," and similar enterprises.

This story is perhaps another outcropping of the current tendency to romantic fiction, but it is said that it has not been influenced by any of the recent American successes in this field.

VIN MARIANI IN EXHAUSTION.

We have had occasion in numerous instances to administer "Vin Mariani" to business and professional men who complained of being gradually run down. The work of the office, the cares and worry entailed by business and the physical flaccidity brought on by overwork, all seemed to give away completely in a marvelous short space of time, despite the fact that the subjects continued uninterruptedly at their usual occupations. The notable fact to be observed is that in each instance the effect was permanent. But it must not be forgotten that, in order to make this result a lasting one, it is necessary to keep the patient upon a prolonged course in the use of "Vin Mariani." There is no doubt whatever that this preparation has proven itself a boon to mankind.—*The St. Louis Medical and Surgical Journal, March, 1899.*

W. Irving Hyslop, M. D., 4408 Chestnut street, West Philadelphia, Pa., says: "I have used Celerina quite largely both in private and hospital practice, and with gratifying results. It is void of repugnant taste and is readily retained by the stomach. My experience with Celerina has been confined chiefly to its use in nervous diseases, particularly loss of nerve power, and the opium habit, in which conditions it has served me well, and I shall continue to prescribe it both in private and hospital practice."